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<p>(21) International Application Number: <b>PCT/GB99/04425</b></p> <p>(22) International Filing Date: <b>24 December 1999 (24.12.99)</b></p> <p>(30) Priority Data:</p> <table> <tr> <td>9828467.2</td> <td>24 December 1998 (24.12.98)</td> <td>GB</td> </tr> <tr> <td>9927418.5</td> <td>22 November 1999 (22.11.99)</td> <td>GB</td> </tr> </table> <p>(71) Applicants (<i>for all designated States except US</i>): WHITWORTH, Dorothy [GB/GB]; Beech Hill Farm, Longsledale, Nr Kendal, Cumbria LA8 9BB (GB). HOLLINGWORTH, Helen [GB/GB]; Newlands, Levens, Nr Kendal, Cumbria LA8 8PA (GB). LOCKWOOD, Mauna [GB/GB]; High Hampsfield Farm, Nr Grange-over-Sands, Cumbria LA11 6LY (GB).</p> <p>(72) Applicant and Inventor: <u>WHITWORTH, Andrew, John [GB/GB]; Poplar House, Hampsfell Road, Grange-over-Sands, Cumbria LA11 6BE (GB)</u>.</p> <p>(74) Agent: W.P. THOMPSON &amp; CO.; Coopers Building, Church Street, Liverpool L1 3AB (GB).</p>		9828467.2	24 December 1998 (24.12.98)	GB	9927418.5	22 November 1999 (22.11.99)	GB		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TI, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p>
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			<p>Published <i>With international search report.</i></p>						
<p>(54) Title: A PTFE TUBE</p> <p>(57) Abstract</p> <p>The present invention relates to a polytetrafluoroethylene (PTFE) tube, and more particularly to a PTFE tube for a flexible hose. In particular the invention relates to a PTFE tube having a smooth bore for use in the production of a lined hose assembly further comprising hose braids, external hose protection and end fittings. The PTFE tube comprises external roots and peaks, which tube is obtainable from a non-convoluted tube having an original wall thickness <math>W_0</math> and an internal diameter ID by a process in which a region of the tube is thinned to provide external convolutions with a root wall thickness <math>W_1</math> characterised in that the convoluted PTFE tube has an improved resistance, of greater than 7.6 %, to permeation by comparison with the non-convoluted tube, the comparison being made between tubes of (i) equal nominal bore ID; and (ii) equal weight of PTFE per unit length.</p>									
<p>(i) heat above the gel transition temperature in the absence of a restraining force</p> <p>(ii) cool to below the gel transition temperature with a restraining force while convolutions become stable</p>									